CLAIMS

1.   Method for transmitting data from several first stations
(1a-1n) to a second station (2), the first stations each comprising
at least a first transmitter (11), a first receiver (12) and a first
clock (16), and the second station (2) comprising at least a second
transmitter (21), a second receiver (22) and a second clock (26), the
method comprising:
-       transmitting, in a synchronisation time slot (5) of a time
        window (4), a synchronisation message (SYN) from the second
        station (2) to the first stations (1),
-       transmitting, in a selection time slot (6) of the time window
        (4), selection messages (SEL) from the second station (2) to
        selected first stations (1),
-       transmitting, in response time slots (8) of the time window
        (4), data from selected first stations (1) to the second
        station (2),
characterised by transmitting, in a single selection time slot (6),
the selection messages (SEL) and by deactivating, by each first
station (1), its receiver (12) if no respective selection message
(SEL) has been transmitted.

2.   Method according to claim 1, wherein the deactivation takes
place at the end of the selection time slot (6).

3.   Method according to claim 1, wherein the selection messages
(SEL) are transmitted in a predetermined sequence and the
deactivation takes place based on the sequence.

4.   Method according to claim 3, wherein several sequences are
applied and a sequence indication of the sequence to be applied in a
specific time window (4) is transmitted by the second station (2) in
the synchronisation time slot (5).

5.   Method according to any one of claims 1-4, wherein the
selection messages (SEL) each contain a time indication (TR) of the
response time slots (8).

6.   Method according to any of ~~the~~ claims 1-$, wherein the
selection messages (SEL) each contain a time indication (TC) of
command time slots (7) following the selection time slot (6) for
transmitting command messages (COM) from the second station (2) to
5   the selected first station (1).

7.   Method according to claim 6, wherein a command message (COM)
contains a time indication (TR) of a response time slot (8).

8.   Method according to ~~any of the preceding claims~~ *any one of claims 1-4*, wherein the
10   transmitter (11) of each first station (1) is activated only during
the respective response time slot (8).

9.   Method according to ~~any of the preceding claims~~ *any one of claims 1-4*, wherein the
15   duration of ~~the~~ current time window (4) is transmitted to the first
stations (1) by the second station (2) in the synchronisation time
slot (5).

10.   System for transmitting data comprising:
20   -   several first stations (1), each having a first transmitter
        (11), a first receiver (12), a first control unit (13) and a
        first clock (16),
-    a second station (2) having a second transmitter (21), a second
        receiver (22), a second control unit (23) and a second clock
25   (26),
the first stations (1) being arranged for synchronising their clocks
(16) based on a synchronisation message (SYN) transmitted by the
second station (2), and transmitting data as a function of selection
messages (SEL) transmitted by the second station (2),
30   characterised in that
the second station (2) is arranged for consecutively transmitting the
selection messages (SEL), and that the first stations (1) are
arranged for deactivating their receivers (12) in response to the
absence of a corresponding selection message (SEL).